REMARKS

In the Office Action dated November 23, 2007, the Examiner: rejected claim 18 as being indefinite under 35 U.S.C. § 112, second paragraph; rejected claim 27 as lacking antecedent basis for the limitation "timing considerations"; rejected claims 1-3, 5-6, 10, 18-21 and 24-26 as being anticipated under 35 U.S.C. § 102(b) by U.S. Patent No. 4,812,840 ("*Girard*"); rejected claim 4 as being unpatentable under 35 U.S.C. § 103 over *Girard* in view of U.S. Patent No. 5,587,707 ("*Dickie*"); rejected claims 8 and 11-14 as being unpatentable under 35 U.S.C. § 103 over *Girard* in view of European Patent Application No. EP0545001 ("*Morimoto*"); rejected claim 9 as being unpatentable under 35 U.S.C. § 103 over *Girard* in view of *Morimoto* and *Dickie*; and objected to claims 7, 15-17 and 27 as being dependent on a rejected base claim, but otherwise allowable. Applicant thanks the Examiner for noting the allowable subject matter of the objected to claims.

In this response, Applicant amends claims 1, 5, 6, 10, 18 and 24-27, and adds claim 28. Based on the amendments and argument presented herein, Applicant respectfully requests reconsideration and allowance of the pending claims.

The Cited References

Girard teaches a communication system for an Automatic Teller Machine (ATM). The communication system has a switching device 10 that supports different modes to enable a first device or a second device to communicate with an ATM (see col. 2, lines 51-64). A first mode corresponds to a manual switching mode. A second mode corresponds to an automatic switching mode that maintains each connection until a communication is complete and the other device has requested connection (no interruptions are permitted). A third mode corresponds to an automatic switching mode that gives priority to one of the devices (interruptions are permitted for one device, but not the other). *Girard* appears to be unrelated to redundancy and simply provides a technique for sharing an ATM between multiple devices. For this reason, failures and the validity of data streams are not discussed in *Girard*.

Dickie is simply cited to teach a subsea communication system and does not appear to address Applicant's other claimed limitations.

Morimoto teaches a redundant system having a "duplex" package configuration and failure detection. If one of the packages fails, the failed package can be replaced without interrupting the operation of the active package (see Figs. 3-5; page 6, lines 26-32; page 6, line 54 – page 7, line2; and page 8, lines 27-34).

§ 112 Rejections

The Examiner rejected claim 18 as being indefinite under 35 U.S.C. § 112, second paragraph. Although Applicant does not necessarily agree with the Examiner's rejections, Applicant has nonetheless amended claim 18 to replace the phrase "an amount of time that has passed since a different data stream has been forwarded" with "a switch-based timing threshold". As explained in MPEP § 2173.02, the test for definiteness under 35 U.S.C. § 112, second paragraph is whether "those skilled in the art would understand what is claimed when the claim is read in light of the specification." *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576, 1 USPQ2d 1081, 1088 (Fed. Cir. 1986). Applicant submits that claim 18, as amended, meets this requirement. For at least this reason, Applicant requests that the Examiner withdraw the indefiniteness rejection with respect to claim 18.

The Examiner rejected claim 27 as lacking antecedent basis for the term "the timing considerations." Applicant has amended claim 27 to depend from claim 25 which introduces the term "timing considerations." Accordingly, Applicant requests that the Examiner withdraw the lack of antecedent basis rejection with respect to claim 27.

§ 102 Rejections

Claim 1, in part, requires "a first master device" and "a second master device." The Examiner cites *Girard's* controllers 20 and 22 as comparable to Applicant's claimed master devices. See Office Action dated 11/23/07, page 2, item 4. However, Girard states that the controllers 20 and 22 are "both controlled by a processor 24" (see col. 2, lines 54-56). Further, the controllers 20 and 22 appear to function simply as relays between the processor 24 and the multi-mode switch 10. Thus, *Girard's* controllers 20 and 22 appear to be slave devices for the processor 24 or simple relays rather than "master devices" as in claim 1. For at least this reason, claim 1 and its dependent claims are allowable over *Girard*.

Claim 3 depends from claim 1 and is allowable for the same reason. In addition, claim 3 requires "the first and second master devices are in different locations such that a user having access to the first master device is not able to simultaneously access the second master device and vice versa." *Girard* does not teach this limitation. The controllers 20 and 22 are not describes as being remote from each other. On the contrary, *Girard's* controllers 20 and 22 are both controlled by the same processor 24 (see col. 2, lines 54-56). Thus, *Girard* at least indicates that the controllers 20 and 22 would be near each other. For at least this additional reason, claim 3 is allowable.

Claim 5 depends from claim 1 and is allowable for the same reason. In addition, claim 5 requires that the redundancy manager is configured to selectively forward one of the first and second data streams based on "a validity estimation of the first data stream" and "a validity estimation of the second data stream." The switch modes taught in *Girard* involve manual control, waiting for communications to complete and requests to be received (no interruptions allowed), or waiting for communications to complete and requests to be received (interruptions allowed for one controller, but not the other) (see col. 3, lines 11-33). However, *Girard* does not teach that the validity of data streams is considered as in claim 5. For at least this additional reason, claim 5 is allowable.

Claim 6 depends from claims 1 and 5 and is allowable for the same reasons. In addition, claim 6 requires that mastership transfer commands are sent to the redundancy manager in response to "user intervention" <u>and</u> "at least one of data content received from the slave data and a lack of data received from the slave device." *Girard* mentions a manual mode that involves user intervention (see col. 3, lines 11-16), but does not combine the manual mode with data content or a lack of data from the slave device as in claim 6. For at least this additional reason, claim 6 is allowable.

Claim 10, in part, requires a "first master device" and a "second master device." For much the same reasons as given previous with respect to claim 1, *Girard* does not teach Applicant's claimed master devices as in claim 10. Claim 10 further requires "the first processor asserts and de-asserts the switch control signal in response to a determination of first and second data stream validity and mastership transfer commands associated with the first and second master devices." The switch modes in *Girard* do not involve "a processor that asserts and de-asserts the switch control signal <u>in response to a determination of first and second data stream validity</u>." As previously discussed with respect to claim 6, *Girard* does not even consider data stream validity. For at least these reasons, claim 10 and its dependent claims are allowable over *Girard*.

Amended claim 18 requires "receiving a plurality of data streams" and "forwarding one of the data streams according to a prioritization of data stream validity, requests to forward a particular data stream, and a switch-based timing threshold." *Girard* does not even discuss data stream validity and thus does not forward data streams based, in part, on a prioritization of data stream validity. For at least this reason, claim 18 and its dependent claims are allowable over *Girard*.

Claim 19 depends from claim 18 and is allowable for the same reason. In addition, claim 19 requires "cycling between forwarding the data streams if a determination is made that none of the data streams are valid." *Girard* does not even discuss data stream validity and much less cycling between

forwarding different data streams "if determination is made that none of the data streams are valid" as in claim 19. For at least this additional reason, claim 19 is allowable.

Claim 20 depends from claim 18 and is allowable for the same reason. In addition, claim 20 requires "detecting when a data stream becomes valid and setting a relay to forward the valid data stream." *Girard* does not discuss data stream validity. Detecting when a communication is complete as in *Girard* is unrelated to detecting whether a data stream is valid or not. *Girard* appears to indicate that there would not even be a data stream when a communication is complete. A lack of a data stream is not the same as an invalid data stream. For at least this additional reason, claim 20 is allowable.

Claim 21 depends from claim 18 and is allowable for the same reason. In addition, claim 21 requires "upon receiving a request to forward a particular data stream determining if the particular data stream is associated with a healthy master device." *Girard* does not even discuss failures of the controllers 20 and 22 and appears to be unrelated to redundancy. Thus, in *Girard*, there is no "determining if the particular data stream is associated with a healthy master device" as in claim 21. For at least this additional reason, claim 21 is allowable.

Claim 24, in part, requires "means for controlling coupled to the means for switching mastership, wherein the means for controlling asserts and de-asserts a signal to control the means for switching mastership based on requests originating from an active master device and requests originating from an idle master device." The switch modes taught in *Girard* involve manual control, waiting for communications to complete and receiving a request from the other controller (no interruptions allowed), or waiting for communications to complete and receiving a request from the other controller (interruptions allowed for one controller, but not the other) (see col. 3, lines 11-33). *Girard* does not teach that an active master device can request switching mastership. Instead, *Girard* maintains the same mastership (an active mastership) unless the other controller makes a request. For at least this reason, claim 24 is allowable over *Girard*.

Claim 25 depends from claim 24 and is allowable for the same reason. In addition, claim 25 requires "means for switching mastership based on a validity estimation of the data streams from the first and second master devices." *Girard* does not discuss data stream validity and thus does not teach the claimed limitations. For at least this additional reason, claim 25 is allowable.

Claim 26 depends from claim 24 and is allowable for the same reason. In addition, claim 26 requires first and second master devices are configured to send requests to transfer mastership in response to "user input" and "at least one of data content received from the slave device and a lack of

data received from the slave device." *Girard* mentions manual switching, but does not combine user input with whether data is received from the slave device or not as recited in claim 26. For at least this additional reason, claim 26 is allowable.

§ 103 Rejections

The rejections under U.S.C. § 103 are directed to dependent claims 4, 8-9 and 11-14. The additional references (*Dickie* and *Morimoto*) do not overcome the deficiencies of *Girard* discussed previously. For at least this reason, claims 4, 8-9 and 11-14 are not obvious and thus Appellant respectfully requests that the § 103 rejections be withdrawn and these claims set to issue.

Allowable Subject Matter

Applicant acknowledges with appreciation the Examiner's indication that claims 7, 15-17 and 27 contain allowable subject matter. At this time, Applicant chooses not to write these claims in independent form.

New Claim

Claim 28 depends from claim 1 and is allowable for the same reasons. In addition, claim 28 requires that "both of the first and second master devices are configured to simultaneously monitor a data stream from the slave device." *Girard* does not teach this limitation. In *Girard*, the switch 10 connects only one controller (20 or 22) at a time to the ATM 28 (see Fig. 1 and col. 2, line 59 – col. 3, line3). Further, the controllers 20 and 22 appear to act as relays between the processor 24 and the ATM 28. Presumably, the processor 24 monitors data from the ATM, not the controllers 20, 22. For at least these reasons, claim 28 is allowable.

CONCLUSIONS

During the course of these remarks, Applicant has at times referred to particular limitations of the claims that are not shown in the applied prior art. This shorthand approach to discussing the claims should not be construed to mean that the other claimed limitations are not part of the claimed invention. They are as required by law. Consequently, when interpreting the claims, each of the claims should be construed as a whole, and patentability determined in light of this required claim construction. Unless Applicant has specifically stated that an amendment was made to distinguish the prior art, it was the intent of the amendment to further clarify and better define the claimed invention and the amendment was not for the purpose of patentability. Further, although Applicant may have amended certain claims, Applicant has not abandoned its pursuit of obtaining the

allowance of these claims as originally filed and reserves, without prejudice, the right to pursue these claims in a continuing application.

Should any fees have been inadvertently omitted, or if any additional fees are required, or if any fees have been overpaid, please appropriately charge or credit to those fees to Deposit Account No. 03-2769 of Conley Rose, P.C., Houston, Texas and consider this paper a petition for any necessary extension of time.

If the Examiner has any questions or comments regarding this communication, he is invited to contact the undersigned to expedite the resolution of this application.

Respectfully submitted,

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